

CLAIMS

1. A composition for prevention and treatment of oral cavity diseases, comprising a therapeutic agent in a biocompatible polymeric material,

5 wherein said therapeutic agent is soluble both in water and in alcohol,
and that said biocompatible polymeric material is a liquid methacrylate copolymer EUDRAGIT[®] RL or EUDRAGIT[®] RS and mixtures thereof,

wherein a film is formed by spreading topically said composition and said therapeutic agent is released progressively by water permeation through said
10 polymeric material.

2. The composition of Claim 1, wherein said liquid methacrylate copolymer is a mixture of EUDRAGIT[®] RS 100 and EUDRAGIT[®] RL 100.

3. The composition of Claim 1, wherein the ratio RS/RL is comprised between 1.5:1 and 3:1.

15 4. The composition of Claim 1, wherein the solvent of said liquid methacrylate copolymer is an alcoholic solvent that further comprises 1-20% water.

5. The composition of Claim 1, wherein said therapeutic agent is selected from the group consisting of:

20 antibacterial agents – chlorexidine acetate, thimerosal, cetylpyridinio chloride, benzalkonium chloride, cetrimide, benzethonium chloride;

antibiotics - piperacillin sodium, carbenicillin sodium, carindacillin sodium, chloramphenicol sodium succinate, clindamycin palmitate hydrochloride, cloxacillin sodium, erythromycin gluceptate and lactobionate, flucloxacillin
25 sodium, lincomycin hydrochloride, nafcillin sodium, tetracycline hydrochloride, minocycline;

dentinal desensitising agents - strontium chloride, zinc chloride, calcium chloride, magnesium chloride, stannous chloride, potassium sorbate

antivirals - acyclovir, idoxouridine, amantadine,

30 and mixtures thereof.

6. The composition of Claim 1, wherein said biocompatible polymeric material and said therapeutic agent are mixed in the following weight ratio

Eudragit RL 100 0.3-5% (w/w)

Eudragit RS 100 0.5-10% (w/w)

5 Therapeutic agent 1-20% (w/w)

Ethanol 96% q.s. 100 g

7. The composition of Claim 1, wherein said biocompatible polymeric material and said therapeutic agent are mixed in the following weight ratio

Eudragit RL 100 0,3-5% (w/w)

10 Eudragit RS 100 0,5-10% (w/w)

Therapeutic agent 1-20% (w/w)

Purified water 1-20% (w/w)

Ethanol 96% q.s. 100 g

8. The composition of Claim 1, wherein said therapeutic agent is selected
15 from the group consisting of: Piperacillin sodium, Cholramphenicol sodium succinate, and Clindamycin palmitate.

9. The composition of Claim 1, wherein said biocompatible polymeric material and said therapeutic agent are mixed in the following weight ratio

Eudragit RL 100 0.3-5% (w/w)

20 Eudragit RS 100 0.5-10% (w/w)

Cetrimide 0.1-1%(w/w)

Chlorexidine acetate 0.05-0,5% (w/w)

Ethanol 96% q.s. 100 g

10. The composition of Claim 1, wherein said biocompatible polymeric material therapeutic agents are mixed in the following weight ratio

Calcium chloride 1-15% (w/w)

5 Zinc chloride 1-15% (w/w)

Eudragit RS100 0.5-12% (w/w)

Ethanol 96% q.s. 100 g

wherein a second solution is added topically according to the following composition

10 Potassium fluoride 1-15% (w/w)

Dibasic potassium phosphate 1-20% (w/w)

Purified water q.s. 100 g

is added topically for desensitisation of exposed dentin.

11. The composition of Claim 1, wherein said biocompatible polymeric material therapeutic agents are mixed in the following weight ratio

15 Zinc chloride 1-10% (w/w)

Strontium chloride 1-10% (w/w)

Eudragit RS100 0.5-12% (w/w)

Purified water 1-20% (w/w)

20 Ethanol 96% q.s. 100 g

wherein a second solution according to the following composition

Potassium fluoride 1-20% (w/w)

Purified water q.s. 100 g

is added topically for desensitisation of exposed dentin.

12. The composition of Claim 1, for treating diseases caused by Herpes Labialis, wherein said biocompatible polymeric material and therapeutic agents are mixed in the following weight ratio

- 5 Acyclovir 1-5% (w/w)
- Eudragit RL100 0,3-5%(w/w)
- Eudragit RS100 0,5-10% (w/w)
- Transcutol 1-15% (w/w)
- Ethanol 96% q.s. 100 g

- 10 A composition for the desensitisation of exposed dentin, comprising a therapeutic agent in a biocompatible polymeric material, wherein said biocompatible polymeric material is a liquid methacrylic polymer, said therapeutic agent is soluble both in water and in alcohol and is an alcoholic solution or an alcoholic gel of a zinc salt and a salt selected from the group
- 15 consisting of calcium salt, a strontium salt, and a combination thereof, and said therapeutic agent in a biocompatible polymeric material being combined topically to an aqueous solution or an aqueous gel of potassium fluoride, with addition of dibasic potassium phosphate.